



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Department of Environmental Quality

William J. Sinclair
Acting Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

DAQE-IN0101210192-09

March 26, 2009

Robert James
Hill Air Force Base
75 CEG/CEV
7274 Wardleigh Road
Hill Air Force Base, UT 840565137

Dear Mr. James:

Re: Intent to Approve: Modification to Approval Order BAQE-669-88 to Add Flexibility Provisions for the Solvent Recycling Operations; Davis County; CDS A; Major criteria source, NSPS (Part 60), Nonattainment and Maintenance Area, Title V (Part 70)
Project Number: N010121-0192

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Tad Anderson, who may be reached at (801) 536-4456.

Sincerely,

Ty L. Howard, Manager
Major New Source Review Section

TLH:TA:sa

cc: Mike Owens
Davis County Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Modification to Approval Order
BAQE-669-88 to Add Flexibility Provisions for the
Solvent Recycling Operations**

**Prepared By: Tad Anderson, Engineer
Phone: (801) 536-4456
Email: tdanderson@utah.gov**

INTENT TO APPROVE NUMBER

DAQE-IN0101210192-09

Date: March 26, 2009

**Main Base
Source Contact:
Mr. Glenn Palmer
Phone: (801) 775-6918**

**Ty L. Howard, Manager
Major New Source Review Section
Utah Division of Air Quality**

ABSTRACT

Hill Air Force Base (HAFB) has requested a modification to Approval Order (AO) BAQE-669-88 to add flexibility provisions for solvent recycling units not to exceed the current limit of 40,000 gallons per rolling 12 month period.

EPA-AP-42 Section 4.7 describes solvent recycling to consist of solvent storage and handling, distillation, and waste disposal. Recycling units are relatively small, intermittent operations which warm the solvent to a boil, and the vapor rises into a condenser where it is cooled back into a liquid, and the clean solvent is collected in a tightly covered container. Each solvent recycling unit will have tightly covered containers and shall be equipped with a condenser that must operate whenever distillation operations take place.

The estimated emissions increase will be 0.437 tons per year of VOC and the total estimated emissions will be 0.444 tons per year of VOC.

This operation is not subject to any current NSPS and is not covered by the NESHAP for Aerospace Manufacturing and Rework Facilities (40 CFR 63 subpart GG). The solvent recycling units shall operate under the requirements of State Rules UAC R307-325 and R307-335. The Title V permit will be administratively amended to incorporate these changes. HAFB is located in Davis County, which is a maintenance area for ozone, but is an attainment area for other criteria pollutants.

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Davis County Clipper on March 31, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

Name of Permittee:

Hill Air Force Base
75 CEG/CEV
7274 Wardleigh Road
Hill Air Force Base, UT 84056-5137

Permitted Location:

Hill Air Force Base: Main Base
75 CEG/CEV
7274 Wardleigh Road
Hill Air Force Base, UT 84056-5137

UTM coordinates: 416,588 m Easting, 4,553,000 m Northing
SIC code: 9711 (National Security)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of five (5) years. [R307-401] [R307-415-6b]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

II.A.1 Permitted Source
Source-wide

II.A.2 Solvent Recycling Units
Solvent Recycling Units Located throughout Hill Air Force Base

II.B Requirements and Limitations

II.B.1 Site Wide Requirements on Solvent Recycling Operations

II.B.1.a HAFB shall operate the solvent recycling operations under conditions (1) through (6) below.

- (1) A cover shall be installed which shall remain closed except during actual loading, unloading or handling of parts in cleaner. The cover shall be designed so that it can be easily operated with one hand if:
 - (a) the volatility of the solvent is greater than 2 kPa (15 mm Hg or 0.3 psi) measured at 38 degrees C (100 ° F),
 - (b) the solvent is agitated, or
 - (c) the solvent is heated.
- (2) An internal draining rack for cleaned parts shall be installed on which parts shall be drained until all dripping ceases. If the volatility of the solvent is greater than 4.3 kPa (32 mm Hg at 38 degrees C (100° F)), the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Waste or used solvent shall be stored in covered containers. Waste solvents or waste materials which contain solvents shall be disposed of by recycling, reclaiming, by incineration in an incinerator approved to process hazardous materials, or by an alternate means approved by the Executive Secretary.
- (4) Written procedures for the operation and maintenance of the degreasing or solvent cleaning equipment shall be permanently posted in an accessible and conspicuous location near the equipment.
- (5) If the solvent volatility is greater than 4.3 kPa (33 mm Hg or 0.6 psi) measured at 38° C (100° F), or if solvent is heated above 50° C (120° F), then one of the following control devices shall be used:
 - (a) freeboard that gives a freeboard ratio greater than 0.7;
 - (b) water cover if the solvent is insoluble in and heavier than water;
 - (c) other systems of equivalent control, such as a refrigerated chiller or carbon absorption.
- (6) If used, the solvent spray shall be a solid fluid stream at a pressure that does not cause excessive splashing and may not be a fine, atomized or shower type spray. [R307-335]

II.B.1.a.1 Monitoring - Visual inspection shall be made annually to determine compliance. [R307-401]

II.B.1.a.2 Recordkeeping - Results of monitoring shall be maintained. [R307-401]

- II.B.1.b The total amount of solvent recycled shall not exceed 40,000 gallons per rolling 12-month total. [R307-401]
- II.B.1.b.1 Monitoring - Records of solvent recycled shall be kept on a daily basis when in operation. HAFB shall calculate a new rolling 12-month total by the 30th of each month (for the 28th for February) using the previous 12 months. [R307-401]
- II.B.1.c Flexibility Provisions: HAFB is allowed to add or modify solvent recycling units, provided that each of the following conditions are met:
- (1.) The proposed addition or modification does not cause an increase in the currently established base-wide 40,000 gallons of recycled solvent per rolling 12 month period.
 - (2.) The new or modified equipment must meet the requirements listed in this permit as BACT determination. If new BACT for this type of operation is established, UDAQ has the right to reopen this permit to change BACT for this operation accordingly.
 - (3.) Notification of new or modified equipment installation must be submitted to UDAQ seven days prior to such installation. Relocation or removal of equipment which does not involve a modification (increase in emissions or installation of new air pollution control equipment) will not require prior notification. Notification shall include equipment size, type, location, conformity with BACT standards, estimated usage and impact on the limitations in this permit.
 - (4.) HAFB shall generate a list of operating solvent recycling units (equipment list) that are subject to this condition within three working days upon request from a representative of the Executive Secretary. This equipment shall contain solvent recycling equipment size, type, location, and equipment identification. [R307-401]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

NSPS (Part 60), Kb: VolatLiq/Petro Storage Vessel 7/23/84
NSPS (Part 60), A: General Provisions

PERMIT HISTORY

The final AO will be based on the following documents:

Is Derived From
Supersedes

NOI dated December 18, 2008
BAQE-669-88 dated December 20, 1988

ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
ATT	Attainment Area
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds